



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE WILD CATTLE OF GREAT BRITAIN.

BY R. C. AULD, F.Z.S.

THERE has always been a great deal of interest manifested in the lay as well as in the scientific mind as to the wild cattle of Britain. The British Association appointed a committee to inquire into the condition of these herds, and at a late meeting this committee's report was presented by Canon Tristram. The herds at present existing were stated to be those at Chartley, Chillingham, Cadzow, Somerford, Blickling, and Vaynol. The last (near Carnarvon) does not seem to be mentioned by Storer or Harting.

The committee thought it would be extremely interesting if the noble owners of the three ancient herds—Chartley, Chillingham, and Cadzow—would co-operate with some other owner of a large park, if haply such could be found, willing to undertake the following experiment: All calves which would ordinarily be converted into veal or steers should, instead, be sent to build up a new herd, which, combining the blood of the only remaining ancient herds and with no artificial selection exercised, might be expected to revert more nearly to the aboriginal wild type than could be achieved in any other way.

The care with which the European bison is preserved in Poland, under the especial protection of the Czar of Russia, has been noted. The interest of the Russian and British "quality" from the earliest date in taking means to preserve these aboriginal animals is most praiseworthy and contrasts favorably with the apathy of Americans in regard to their aboriginal bison. Why should not the American Association take this matter in hand, and, ere too late (if not, indeed, too late already), secure from government a regional reservation and sufficient enactment that would ensure the preservation of this interesting species?

Some of these wild British herds were horned; most were polled. Some of them became domesticated; most of them became extinct. Their antiquity cannot be limited; they were among the original cattle of the island—indeed, descendants of the Uri that roamed into this corner of Europe before it became an island.

But some do not care to trace the origin of British cattle further than the historical dates of the subjugation of the various parts of

the island by Roman, Norseman, Dane, and Norman. The student who has devoted himself unremittingly to this historical aspect of the question is the Rev. G. Gilbert, of Claxton, Norwich. The views of this gentleman, who has paid much attention to the history of the polls, are worthy of study, and it is here appropriate to refer to them. I do so by quoting extracts from several communications I have been favored with from him: "My own opinion," he writes (and he begins by referring to the Aberdeen poll) "is that there was in Scotland, on the east coast, long before the short-horn struggled into notoriety, even in England, herds of polled cattle which owed their best qualities of hardiness and combined power of producing good beef and milk from the same animal to that very breed which gave these properties to the short-horn—*i.e.*, to that big polled white which seems to me to have come to Great Britain above eight hundred years ago with the Baltic Rovers, and to have existed in considerable numbers, in places widely apart, down to the beginning of last century without there having been any recent connection.

"The polled herds in England, Scotland and Ireland all held, before there was much intercourse between cattle-men, one common infusion, and that was the blood of the whites from the far north. Those white cattle seem to have parted with their color more readily than they parted with their thick muscle (*i.e.*, lean flesh), tending to milk, hardiness, and polled heads. (Of course recently, since 1750, there have been large transmissions of English cattle to Scotland, and *vice versa*, and also of English and Scotch cattle to Ireland. I doubt if ever before this century either England or Scotland has ever borrowed sires from Ireland, though England has borrowed for quite a century Scotch sires, and Scotland English sires for the same period.) Gradually, at the end of the last century, distinct types of those county herds which all had some ingredients common and, each, some distinct element, got more or less fixed, until they reproduced themselves, as they do now, even in non-pedigree stock, with tolerable certainty. I fancy the last half of last century saw the formation of *all* British breeds now existing in distinct form. The short-horns and all the polls hold the largest infusion of the big white, the Midland and Hereford hold the most of the old South Europe longhorn, whilst the Devon, Kerry, and small North Highlander hold the most of the type known as *Bos longifrons*, all of which seem to have been the first domestic cattle in Great Britain and Ireland.

"I think that very likely *Bos urus* was already in both islands as a wild beast. But *Bos urus* and the big white are not the same. The big white was domesticated from the first, and probably came, as you yourself suggest, from the polled breeds of India. I am trying to gather all the evidence I can get to show what the last thousand years may have done to make British breeds what they are, and thence to infer what the thousand years before that may have contributed. The long-horn, as I fancy, came over with the Romans, and the white polls with the Danes long subsequently. It was through the working of this Danish introduction that all the polled breeds took their rise. I fancy during the Wars of the Roses in England and up to the time of the union with Scotland breeding cattle was pursued without any aims beyond these:—

"1. Certain districts tried to get big oxen for labor.

"2. Other districts avowedly preferred the smaller cattle, as better able to live in the huts with their owners.

"Through these influences, up in the mountains, the smaller or (*Bos longifrons*) North Highland type kept its ground. In the plains and near the towns the cattle became larger, partly from selection, partly because their veins were filled with many inter-mixtures. Bulls would come from the south as baggage animals in the track of returning armies and would be crossed with and enlarge the native cows. So all through the richer lands on the south and east side of Scotland there was not any fixed type for a century or two as there was in the north and the west. But still it was these cattle of the plains (I believe) which originated the 'doddies.'

"Wherever the Dane (white polled) extended itself it broke the colors—first conveyed the disposition to throw occasional polled calves. The disposition to produce polled calves and the mixing colors are evidences of latent (perhaps very remote) connection with the Danish introduction.

"It would be absurd to suppose that the Danish introductions were all that we now regard as 'pure bred'—*i.e.*, all alike and entirely of one descent. Probably there were a few cherished white herds in the north of Europe kept to one type; but, more likely, the cattle were early mixed through the predatory habits of the red-rovers. The Danes may have brought over here a few pure whites, gifts to their chiefs; but they brought over far more which were carried off by their vessels from shores on which they touched

after leaving home but before they reached Britain; so that the Danish additions to Scotch and English breeds were not one but many. Still, it was among their introductions that their tendency to polled calves was brought to this island, and it came from the far north, where, even in the days of Herodotus, its existence was noticed. Before Herodotus we only find traces of it in rock sculpture in the far Orient. Thousands of years ago the polled form was developed (as I think) in India, and it worked its way thence to the shores of the Baltic overland through centuries of slow advances. From the Baltic it found its way to England and Scotland. I do not think from England to Scotland, or *vice versa*, but that the same set of sea-rovers introduced cattle with polled tendencies into both countries almost simultaneously."

It should be stated that the above was written before the publication of Victor Hehn's work (already noticed), in which the latter traces the polled cattle of Western Europe to Scandinavia and the White Sea. Mr. Gilbert takes the history of these continental polls a step farther, following them, it will be seen, to the eastern coasts of Great Britain, landing them with the Baltic invaders, to become the determining element in forming the polled races now existing in Great Britain, whether north or south of the Tweed. "These," writes Mr. Gilbert, "probably were our latest introductions." Hence the polled breeds on the eastern coast would have had prior origin. The various British and foreign forms Mr. Gilbert thus indicates must be studied as a whole in connection with the appearance in Europe of the various hordes who reached it by two routes: *First*, by the northern route, descending upon Mid-Europe from the shores of the Baltic. *Second*, by the southern route, making their way upward, men and cattle, along the shores of the Mediterranean.

The question has raged to which species these wild cattle belonged? Professor Low says of these animals: "The wild breed, or, as it may be termed when domesticated, the white Forest breed—identical with the ancient Urus—is still preserved in a few parks, where the animals, herding and breeding only with one another, retain their pristine characters. Numbers, however, existed in the domesticated state in Wales until late in the last century. . . . Scattered individuals are yet to be met with, as in the County of Pembroke, in no respect distinguishable from the wild cattle of the parks."

J. E. Harting, F.L.S., F.Z.S., the latest scientific authority who has given attention—and that in a most thorough manner—to the wild white cattle, says, in his *British Animals Extinct*, page 214: “The weight of scientific opinion, however, seems to favor the view that these wild cattle were descended from the Urus, either by direct descent through wild animals from the bull, or, less directly, through domesticated cattle deriving their blood principally from him.”

Rütimeyer, Nillsson, Lyell, Darwin, and Boyd-Dawkins believe that our wild white cattle are descended from the Urus in one or other of the two ways above indicated; while Owen and Dr. J. A. Smith (“Notes on the Ancient Cattle of Scotland,” in *Proc. Soc. Antiq. Scotl.*, Vol. IX., p. 587) hold a different view, and consider that *Bos primigenius* became extinct throughout the whole island in prehistoric times. “This may have been the case,” says Harting, “in southern parts of Britain.” But he indicates conclusively that this could not have been the case in undisturbed Caledonia.

In Ireland “no trace of these wild cattle has been discovered, although remains of the smaller *Bos longifrons* have been procured from some localities.”

The late J. Gibson, of the Museum of Science and Art, Edinburgh, Scotland, writing on “Cattle” in the *Encyclopædia Britannica* (ninth edition), says: “*Bos taurus*, var. *Scoticus*, makes the nearest approach of living forms to Urus, represented by Cadzow, Chillingham, Lyne, and Chartley herds.”

These herds have been preserved since early historic times. The pictures by famous artists—such as Ward, Landseer, and others—represent them faithfully.

BRITISH WHITE POLLED CATTLE.

Rev. John Storer’s work¹ is the most exhaustive we have on the subject of the wild white cattle of Britain, while J. E. Harting, F.L.S., F.Z.S., editor of the *Zoologist*, has published a more concise account.²

The following is a tabular view of the various herds:—

¹ Wild White Cattle of Great Britain.

² Extinct British Animals.

British Wild White Cattle (Bos urus).

I. Horned Variety.

1. Sub-variety, having black ears, but no black tip to tail.
Chartley, Drumlanrig,¹ and Athole¹ Herds.
2. Sub-variety, having red or brown ears, but no black tip to tail.
Chillingham and Lyme¹ Herds.

II. Polled Variety.

English Herds.

- (a) Somerford,² Cheshire—Black points.
Wollaton,² Nottinghamshire—Black points.
Burton Constable,² Yorkshire—Black points.
- (b) Gisburne,² Yorkshire—Red or brown points.
(Whalley Abbey.²)
- (c) Middleton,¹ Lancashire—Black and dark brown or red points.
Gunton,^{1,2} Norfolk—Black and dark brown or red points.
Blickling,² Norfolk—Black and dark brown or red points.
Woodbastwick,² Norfolk—Red and dark brown points.
Brooke,^{1,2} Norfolk—Black and brown or red points.

Scottish Herds.

- (d) Ardrossan,¹ Ayrshire—Black and brown or red points.
- (e) Hamilton, Lanarkshire—Black and brown or red points.

The polled herds, it will be seen, have been and are still the more numerous, and a short description of each is appended.

ENGLISH HERDS.

I. THE SOMERFORD PARK HERD, near Congleton, Cheshire, is a domesticated herd, but its cattle are very characteristic, having all the peculiar features of the White Forest breed. It is certainly of great, though unknown, antiquity, their owner, Sir Charles Shakerly, saying: "We have no history of how they came or how long they have been here. I am of the third generation which has

¹ Extinct.² Domesticated.

known nothing about them. The tradition is that they have been here two hundred years." It is probably the best representative



FIG. 1.—Head of White Bull, with black ears and muzzle, of Gunton Herd. (From Storer's *Wild White Cattle of Great Britain*.)

extant of the hornless and tame variety of the originally wild white breed. It is of great importance, as showing what and of great value the numerous ancient herds of white polled cattle were. Perfect and in working order, it gives an excellent idea of what the Gisburne (now extinct) and the Hamilton (now horned) cattle were originally. This herd

seems to be a connecting link between the domesticated white cattle and the wild, and also between those which had horns and those which were polled. An experienced eye cannot fail to trace a very close resemblance between them and the wild horned breed at Chartley. The park is well timbered, the quality of the soil and grass very good, though in the heart of the ancient forest region. The milking properties of the cows are good naturally, and have thus been fully developed. The white color of the cattle is accompanied by black points, and sometimes spots on the neck and body. They are handsome and very uniform as to color. They may have been derived from some ancient monastery, one of which, Vale Royal, only twelve miles distant, has a somewhat similar breed. Storer gives a very full account of them as they existed at the time of his visit to the herd in 1875.

II. WOLLATON HALL HERD,¹ the property of Lords Middleton, situated three miles west from Nottingham, has become extinct during the last fifty years. It was generally known as "the Old Park Breed," which indicated them to be an original and very ancient race. They were polled and had black points. The originally wild nature of the herd interfered with its thorough domestication, in-breeding hastening its extinction, as in many other park herds. They were of specially large and symmetrical proportions. Their pasturage, of considerable extent, was fairly good, though not particularly rich. They are supposed to have become enclosed from the grand old forest of Sherwood. The Wollaton (Somerford),

Chartley, and Lyme (these last two horned) formed the southernmost group of the ancient white cattle, and all were in tolerably close proximity.

III. THE GISBURNE PARK HERD,¹ the property of Lords Ribblesdale, situated in the Valley of the Ribble, in the district of Craven, West Riding of Yorkshire. This herd became extinct in 1859, the cause being in-breeding. They were described by Bewick in 1790 as perfectly white, except the insides of the ears, which were brown. They were thick and deep and as large as any short-horns, had mellow hides, and were excellent milkers. They are said to have been brought originally from Whalley Abbey, being enclosed from the indigenous wild cattle which occupied the great forests of Lancashire. Professor Boyd-Dawkins preserves in the Museum at Owen's College, Manchester, under his charge, the skull of "the last bull" of this herd. In a letter to me, referring to this, he says: "The Gisburne cattle come nearer to the Chillingham cattle than any other breed, being white in color, with reddish-brown inside their ears. The only stuffed specimen and skull of this breed, now extinct, are in the Museum under my charge at Owen's College, Manchester. The Gisburne breed represents, like the Chillingham, the domestic cattle of the *Urus* type which have never been confined in fields, and which, therefore, by contrast with the more domesticated animals, are frequently termed wild. The stuffed specimen above referred to is a cow, low in stature, with a prominent protuberance on the forehead, like that found in the Galloways. The skull, also hornless, and belonging to a bull, labelled 'The last of the ancient breed of wild polled cattle kept at Gisburne Park, Yorkshire, killed 11th November, 1859, and presented by the Rt. Hon. Lord Ribblesdale,' proves that the male was hornless."

IV. MIDDLETON HALL HERD,¹ the property of the Asshetons, Baronets of Middleton, near Manchester, Lancashire, was quite an original one, of very ancient origin. They descended from the wild bulls that invested Blakele, close to Middleton Hall. They gave origin to the Gunton herd, in Norfolk. Dr. Leigh mentions them in 1700 (*Natural History of Lancashire, Cheshire, and the Peak of Derbyshire*, Book II., p. 3), but the origin he traces for them—from the Highlands of Scotland—must be regarded as a mere surmise.

V. GUNTON PARK HERD,¹ the property of Lords Suffield, situated in the northeast portion of Norfolk. The Guntou cattle

were brought from the Middleton herd and were a continuation of it. The cattle became thoroughly domesticated. They had black, or, at any rate, dark brown, points. They were deep milkers. They gradually disappeared; but in their day they had great influence on the cattle of the district. The Rev. George Gilbert confirms this, and also as to their size. They "stood up like dray-horses," while they could be made enormously fat.

VI. BLICKLING HALL HERD (Norfolk) is a domesticated herd still existing. It was derived from Gunton. The cattle had black points. They were considerably affected by the rinderpest, previous to which they were very useful in the dairy. Rev. George Gilbert, who gives a full account of them in Storer's work, says the cows are not above the average of the Galloway and are below that of the Aberdeen. The following is the latest I have seen in reference to this herd, and shows that it contains good material: "A remarkable novelty at this Norfolk show was an exhibition of several animals from Lady Lothian's unique herd of white polled cattle, the beasts having black ears and points. A bull took a first prize, beating several fine Herefords. This curious herd has been kept at Blickling since the reign of Charles II., and it represents one of the oldest types of cattle in the world." (*London Truth*, July 7, 1887.)

VII. WOODBASTWICK HERD, the property of Mr. A. Cator, Norfolk, a domesticated, still existing herd, derived from Gunton. The cattle had red points. They were large, would fat to great weight, and had large manes. They were kept pure up to 1840, when different crosses were had resort to. It is of importance to note that Mr. G. Gilbert states: "It is impossible not to notice that the white polled cattle, both at Blickling and Woodbastwick, are quite distinct (in appearance) from the Norfolk and Suffolk. They are as distinct from the local polled variety as possible,"—and he also includes the Galloway and Aberdeen.

VIII. THE BROOKE HOUSE, OR KERRISON HERD¹ (Norfolk), were a domesticated herd before they became extinct. They were derived from Gunton, and had black points. Rev. George Gilbert, by relationship with the owner of this herd (Sir Roger Kerrison), is very well acquainted with it. He states they stood very high, and that there are traditions of a similar breed of white polled cattle in the Downham district occasionally, even now, polled steers of gigantic size being occasionally found. He saw one in 1877 which

certainly stood six feet high. These cattle may have also been derived from the stock of one of the monasteries of the Premonstratensian Order, which had privileges over certain manors, including Brooke and Kustead, in both of which parishes Sir Roger Kerri-son's ancestors lived. Mr. Storer, speaking of this herd, concludes his account thus: "It demonstrates by the clearest evidence how strong has been the influence of the wild forest breed upon our domestic cattle, how wonderfully persistent is the type, and how it reproduces itself under the most unlikely circumstances—often, perhaps, when its very existence is altogether unsuspected."

IX. BURTON CONSTABLE HERD.¹—This herd is situated in the Holderness or East Riding District of Yorkshire. Storer is not very definite about this herd as to its character. It appears to have been a polled herd. Bewick (1790) gives a brief account of it. He states it was carried off "a few years ago by a distemper." These cattle were much larger than the Chillingham horned cattle, many weighing sixty stones (eight hundred and forty pounds).

SCOTTISH HERDS.

X. ARDROSSAN HERD¹ (Ayrshire), property of the Lords Eglinton, was mentioned by Sir John Sinclair in 1814 as one of the then few remaining examples of Caledonia's ancient breed. It survived till about 1820. They had black points. They were enclosed about 1750. They were traditionally believed to have been horned when introduced to Ardrossan. They were certainly all, or very nearly all, polled within the memory of man. The cause of their becoming hornless was the result of an introduction from the polled Hamilton herd. In other respects they seemed to have differed little from the Caledonian wild cattle, except that perhaps they were smaller. Mr. George Robertson, author of several such works, in his *Description of Cuningham and Ayrshire*, published 1820, says: "They are altogether wild; they have no horns; they are distinguished by the name Caledonian," being an offshoot of the older Hamilton.



XI. THE HAMILTON HERD (Lanarkshire), known also by the names Cadzow and Chatelherault. Mr. Brown, chamberlain to the Duke of Hamilton, in Jesse's *Natural History*, describes

FIG. 2.—Head of Young Bull, *Bos scoticus*. (From Milne Edwards' *Zoology*.)

the Hamilton Urus as having a body dun white, with black points, and the cows as seldom having horns. Sir John Orde says that they were anciently "all polled." Youatt speaks of them as being polled, beginning his account of *The Polled Cattle* with a description of them. Mr. MacGillivray, in his *Essay on the Present State of the Outer Hebrides*, says: "A whitish dun color is also pretty frequently seen, not unlike that of the original wild cattle of Scotland, both the horned breeds at Chillingham, and the polled one at Hamilton, and it is remarked that in all their traditions or fables of what are called fairy cattle this is the color ascribed to these animals." At the sale of the late Dr. Knox's collections a polled skull of the Hamilton wild ox was purchased by the late Professor Goodsir. It was labelled by him *Urus scoticus*, and added to the Anatomical Museum of the University of Edinburgh. Some oxen from this herd were exhibited not many years ago at one of the shows of the Highland Society, and were similarly described. In Milne-Edward's *Zoology*, 1863, Figure 256, the "Head of young Scotch bull, *Urus scoticus*, or wild ox of Caledon, Cadzow," is polled. (See Figure 2.) The skull is labelled "White Ox of Scotland." From this testimony it is pretty clear that the Hamilton herd was originally polled. So late as 1852, W. C. L. Martin, in his book on *Cattle*, says the Hamilton's "are larger and more robust than the Chillingham. . . . The cows, and also the bulls, are generally polled or hornless." And in 1862 Charles Stevenson wrote: "In the herd of wild cattle in Hamilton Park polled bull and heifer calves frequently appear. Latterly no bulls are kept which have not the short white horn tipped with black; but there are a few cows and heifers polled. It may be mentioned that this breed was originally both polled and horned and that both types reappear, notwithstanding the care taken to breed them of a uniform type as to horns and color." Thus is shown the gradual change from *polled* to *horned*. The reason given of their having become horned is stated by Sir John Orde, Kilmory, Argyllshire, to have been from a Highland bull having accidentally got within the park. Some horned calves were produced, and by subsequent selection the herd had got horns generally, the horned character being preferred—likely from the fondness for the grandly-horned Highland cattle, which make such a picturesque feature of the Highland glens and straths. But their horns are "short," not "long." These celebrated polled cattle, variously known as the

Cadzow, Hamilton, or Chatelherault—the first name being the name of their forest home, the second being one of the Scotch titles of the ducal owners, the third being their French title—are thus generally regarded as being the remains of the ancient breed of white cattle which was found on the island when the Romans first visited it, and which they represent as then running wild in the woods. The universal tradition in Clydesdale, where they were called “Caledonian,” is that they have been at Cadzow from the remotest antiquity, and the probability is that they formed part of the establishments of the early British and Scottish kings. Sir Walter Scott’s stirring ballad on the hunting of the wild bull is too well known to need repetition.

THE CALIFORNIA GRAY WHALE.

(*Rhacheanectes glaucus* Cope.)

BY JOHN DEAN CATON.

I FIRST saw this interesting animal eighteen years ago, when running down the coast on the steamer Orizava. We then met them in considerable numbers when on their migration north. We were running but a few miles from shore, and generally observed them on the seaward side, but sometimes on the shore side. Sometimes they appeared quite close to the ship and did not seem to be much alarmed by the presence of the steamer. I have since taken pains to inform myself of the habits and mode of capture of this great sea mammal and think I may safely say that it is the most interesting of all the species of whale known to inhabit the great seas, perhaps because it is the best understood.

It does not inhabit the distant depths of the broad oceans but its habitat is confined to the coast line of the Pacific from Cape St. Lucas at the southern extremity of the peninsula of California to Behring sea and even into the Arctic ocean, where it sports among the icebergs of the north with as much apparent pleasure as it rolls and tumbles among the great breakers in its southern range.

If other species of whales are as strictly migratory as this we lack the evidence to prove it. If others wander about into different seas, and even go from ocean to ocean, they do not move with that